

REPORT FOR THE YEAR 1900.

By R. ETHERIDGE, Junr., Curator.

THE following Report treats of the work performed in the Australian Museum during 1900, and of the condition of the Collections therein.

GENERAL CONDITION AND CARE OF COLLECTIONS.

It is with much satisfaction that I have to report that the whole of the Collections, both exhibited and in store, are in an excellent state of preservation. Nothing has been left undone by the Assistants-in-Charge of the various Sections to render the Collections as complete as the space available will permit. Wherever possible, old or inferior specimens were replaced by more perfect ones, many hitherto unrepresented forms were added, and particular attention was directed to replacing the old manuscript labels by printed ones, and wherever possible these were made of a descriptive nature. The almost entire absence of insect pests, and the cleanly state of the specimens and case interiors is due to the unremitting care of the Assistant-Taxidermist (Mr. R. Grant) and the Articulators (Messrs. H. Barnes, Junr., and A. R. Taylor). Experience has taught us that the perfect condition of Museum specimens, even in a warm climate, is not so much brought about by the lavish scattering of disinfectants, as by constant and careful examination and cleaning. To effect this, it is absolutely necessary to have at least one officer constantly employed in duties of this nature.

It is gratifying to state that, through the perfect sanitary condition in which the Museum premises are always kept, the Staff was quite unaffected by the epidemic of supposed bubonic plague, which raged in Australia during 1899-1900.

ATTENDANCE OF PUBLIC.

The total attendance of visitors during 1900 amounted to 116,927, showing a decrease from the preceding year. The average attendance was 325 on week-days, and 600 on Sunday afternoons. The largest number passing through the turnstile in any one day, and indeed the largest on record, was 2291, on Monday, October 1st ("Eight-hour day"). The decrease in

the number of visitors is to be attributed to the plague scare, and this was particularly noticeable during the months of April and May.

COMMONWEALTH FESTIVITIES.

Our modest endeavour, at the close of the year, towards the Commonwealth Celebration in the beginning of 1901, was carried to a successful conclusion. This will be fully dealt with in my Report for 1901.

MUSEUM STAFF.

One change took place in the *personnel* of the Museum Staff, and one addition was made. The Messenger (S. W. Griffith) resigned on November 10th, and was succeeded by R. C. Park in the same capacity.

Funds having been provided by Parliament for the employment of an additional Attendant, I recommended Mr. W. Thorpe for appointment; this was effected in November. To fill the vacancy caused by the latter's promotion, I suggested the engagement of a young man (J. C. Cullen) who had been favourably recommended to me, and this proposition was also approved and carried out in the same month.

The services of Dr. Thomas Cooksey, B.Sc., Lond., were also retained as Consulting Mineralogist, pending the appointment of a permanent officer. To me, personally, this was particularly gratifying, as it delayed the official severance of our relations with a gentleman who has done much to promote the interests of the Institution, and with whom our intercourse has been of the most cordial nature.

Mr. Allan McCulloch continued his volunteer assistance to Mr. E. R. Waite, and I gladly endorse the sentiments of high esteem in which the latter speaks of the assiduity and ability of his helper.

STRUCTURAL DETAILS.

In my Report for 1899 I referred to the commencement, in August of that year, of two galleries forming a portion of the new South Wing of the Museum, contracted for by Mr. John Howie, of Parramatta. Steady progress was made with this work throughout 1900, although some delay was occasioned by the non-delivery at the proper time of portions of the iron-work, but for this the contractor was in no way responsible. As a step towards the further completion of this wing, an application was made to the Department of Public Works to expend the balance of the voted money in excavating a portion of the ground to receive the foundations of the remainder of the building; this request was complied with, and the work carried out by the same contractor. It is anticipated that the structure of the two half-galleries will be completed within the contract time, and in my Report for 1901, I shall give a brief description of the building,

which has been erected over the workshops, the latter forming the basement. When handed over to the Trustees, the first requirement will be to erect cases, and then to remove the Ethnological Collection from its present quarters. As soon as possible after this, it is proposed to have the present Ethnological Hall pulled down, and the now existing portion of the South Wing connected with the main Museum building. The upper gallery is destined to contain the Anthropological and Ethnological specimens, and the ground floor will be utilised for the extension of the Mammalia and Osteology.

With the aim of providing a detailed plan of the various drainage, water, and gas-supply pipes throughout the premises, I was engaged for some time with the Clerk of Works (Mr. E. H. W. Rumsey) in tracing them out. In consequence of the various demolitions, alterations, and additions of new services during recent years, this proved by no means an easy task, but was ultimately accomplished.

At the annual inspection of floors, roofs, sub-floor spaces, and ventilation air-ways, no trace of further ravages by Termites was discovered, and all structures were found to be perfectly dry and well ventilated. The special preparation with which the under-surface of the floor and joists of the Ethnological Hall was coated at my suggestion, four years ago, was found to be quite fresh, and appeared to have saturated the wood perfectly.

During the progress of arranging the new Fish Gallery, a little consideration convinced Mr. Waite and myself that certain structural additions were requisite to prevent any chance of accident should the gallery ever be overcrowded. It must not be forgotten that this gallery, has never before been used for public purposes. The iron balustrade appeared to be too low and slight, and to remedy this it is proposed to stiffen it with additional standards, raise the hand-rail, and fill in the open iron-work with strong wire guards. A representation was accordingly made to the Department of Public Works, and it is hoped that these additions will be carried out early in 1901.

Messrs. Hocking Bros., contractors, having completed their contract for the erection of the ornamental stone wall along College-street, it became necessary to cut down and regrade the grass plot facing thereto. The same firm also erected a flagstaff over the private entrance to the Museum.

FIRE APPLIANCES.

The charge of these appliances, as in the past, still continues in the hands of the Metropolitan Fire Brigade. Three lengths of new fifty-foot hose were supplied to take the place of a similar quantity condemned, tested and placed in position ready for use. The two new half galleries of the South Wing were also supplied with hydrants and hose. As an additional precaution,

four small emergency hoses were placed in the private portion of the building, one in the basement, and one on each of the three floors; these are attached to the main fire service.

NEW CASES.

In my Report for 1899, I referred to the urgent necessity of providing new cases for the Conchology around the ballustrade of the Invertebrate Gallery. The first half of these was made in the latter part of 1900, and will be placed in position early in 1901. An additional shelf was also fitted to the wall cases of the Fish Gallery.

The following additional closed cabinets were also supplied for use in the Assistants' studies:—A Conchological Cabinet of forty drawers, an Arachnid cabinet of eighteen drawers, a Lepidoptera cabinet of thirty-five drawers, and one for the Zurich Bibliographical Council's Card Reference Catalogue for general use.

Two glass cases were also provided for the Ribbon or Oar-fishes (*Regalecus glesne*, Asc., and *Trachypterus jacksoniensis*, Ramsay).

COLLECTING AND FIELD WORK.

I regret that steps have not yet been taken to supply the services of a trained Collector. The collection of specimens still remains almost dependent on the voluntary efforts of members of the Staff and friends who are willing to devote some portion of their time to it. By this means 1742 specimens were added.

General collections of marine organisms were made at Lord Howe Island, for the Trustees, by Mr. Frank Farnell, Hon. Visiting Magistrate, and by the following residents:—Mrs. T. Nicholls, and Messrs. W. S. Thompson, and J. B. Waterhouse.

Mr. A. J. North continued his field researches on Saturday afternoons and public holidays, thereby adding many nests and eggs to the collection, and facts appertaining to nidification of our birds to his note-book.

Mr. E. R. Waite obtained a few Marsupials on the Hawkesbury River.

Mr. C. Hedley made a very successful trip to Muddy Creek, in Victoria, during his vacation, and obtained a large series of the Eocene and Miocene fossils of that locality. He also visited Twofold Bay and Newcastle, and collected some interesting Mollusca. At the latter place he also secured some very remarkable fossil plants, that will be more particularly referred to in next year's Report.

By far the most interesting "find" of the year, however, was the discovery by Mr. T. Whitelegge, along the neighbouring sea-board, of an aboriginal manufactory of stone implements that has quite shed a new light on some of the habits of the blacks of the metropolitan area.

When at Tarana, during vacation, Mr. J. A. Thorpe was able to replenish our Avian and Reptilian stores to some extent.

In March I visited that part of the South Coast lying between Gerringong and the Shoalhaven River, and took the opportunity of examining the historic locality of Black Head. From the Upper Marine Series of our Permo-Carboniferous Formation, so highly developed there, I obtained a fairly representative collection of fossils. During two visits to Tamworth on official business, I devoted a short time on each occasion, in company with Mr. D. A. Porter, to collecting at Moore Creek and Nundle Road, where the Devonian Limestones are so highly developed. On the second occasion I was ably assisted by a member of the Museum Staff (Mr. B. Lucas).

The following is a statement of the specimens collected :—

Mammalia	...	...	...	...	1
Aves	...	...	...	...	73
Reptilia	...	...	...	...	23
Pisces	...	...	...	...	76
Skeletons (specimens for)	...	...	...	...	6
Mollusca	...	...	...	...	860
Insecta, etc.	...	...	...	...	154
Other Invertebrata	...	...	...	...	193
Fossils	...	...	...	...	305
Minerals	...	...	...	...	7
Ethnological specimens ¹...	...	...	...	...	44
Total	...	...	...	...	1742

PRESENTATIONS.

The specimens presented during 1900 were in excess of those during the preceding year—7089 as against 6058.

The most important donations, more fully referred to in their respective places, were :—

1. Kava-root, in gift form, from Tonga—by *Mr. J. Green.*
2. Aboriginal pigments from N.E. Australia—by *Dr. W. E. Roth.*
3. The Clarke and Prize Medals of the Royal Society of New South Wales—by *The Council.*
4. Co-types of his species of Pleurotomidæ from Lifu—by the late *Rev. J. Hervier.*
5. Electrotyping of the Copley Medal, presented to Capt. James Cook, R.N., F.R.S., by the Royal Society of London—by *The Council.*
6. Palæo-Neolithic Implements from Denmark—by *Mr. E. Hansen.*

¹ Irrespective of Mr. Whitelegge's collection of Aboriginal chips.

7. Cuirass and Armlet from the Gilbert Islands—by *Mr. P. G. Black.*
8. Wolfram, from Noble Island—by *Mr. W. Troup.*
9. Nest of a supposed *Gymnorhina*, based on a mass of entangled fence lacing-wire—by *Mr. W. Loder.*
10. Type of *Eremiornis carteri*, North—by *Mr. T. Carter.*
11. Large collection of Queensland Lower Cretaceous Fossils—by *Mr. H. W. Blomfield.*
12. Micro-slides of Sponge spicules—by *Prof. A. Dendy.*
13. A Child's Doll, from Mallicollo—by *Miss C. Robertson.*
14. Palæo-Neolithic Implements from the Western Egyptian Desert—by *Mr. H. W. Seton-Karr.*
15. Nest and Eggs (with Birds) of the Black-breasted Lark (*Cinchoramphus cruralis*, Vig. & Hors.)—by *Mr. A. Payten.*
16. Dromedary (*Camelus dromedarius*, Linn.)
17. Japanese Macaque (*Macacus fuscatus*, Blyth.)
18. Two Collared Peccaries (*Dicotyles tajacu*, Linn.)—Nos. 16–18 by *The Council, Zoological Society of New South Wales.*

The following is a full statement of the specimens presented:—

Mammalia	...	...	...	...	48
Aves	...	...	...	...	202
Reptilia	...	...	...	...	244
Pisces	...	...	...	...	73
Skeletons (specimens for)	...	...	...	...	33
Mollusca	...	...	...	...	3784
Insecta	...	...	...	...	1070
Other Invertebrata	...	...	...	...	175
Fossils	...	...	...	...	720
Minerals	..	...	...	...	161
Ethnological specimens	498
Historical	12
Coins, etc...	46
Miscellaneous	23
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Total	7089
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EXCHANGES.

A very marked falling off, in the number of specimens acquired by Exchange, took place in 1900. In 1899, 3436 specimens were so obtained, but last year only 580. The principal acquisitions were:—

1. Japanese Butterflies—from *Prof. Yasuski Nawa, Commissioner for Agriculture, Tokio.*
2. Ceylon Land-shells—from *Mr. O. Collett.*
3. Brachiopoda—from *Prof. C. E. Beecher.*
4. Scaphopoda—from *Mr. W. T. Bednall.*
5. Crustacea—from the *Rev. T. R. R. Stebbing.*
6. Polyzoa—from *Prof. F. S. Harmer.*

7. Palæozoic Corals—from *The Geological Survey of Queensland*.
8. Italian Mesozoic and Tertiary Fossils—from *Mr. G. Podenzaga*.
9. Bird-skins and Fish—from the *Western Australian Museum, Perth*.
10. Victorian Ethnological specimens—from the *Warnambool Museum, Victoria*.

The following is a statement of the specimens received:—

Aves	...	...	...	...	10
Pisces	...	...	...	...	2
Mollusca	...	...	...	...	61
Insecta, etc.	...	...	...	...	142
Other Invertebrata	...	...	...	...	1
Fossils	...	...	...	...	299
Minerals	...	...	...	...	25
Ethnological specimens	...	...	...	...	23
Numismatic specimens	...	...	...	...	6
Casts	...	...	...	...	2
Miscellaneous	...	...	...	...	9
					580

PURCHASES.

Our purchasing power was largely increased over the previous year 1645, specimens having been acquired in 1900, as against 301 in 1899, without taking into account the large Porter Collection of Minerals.

The more important purchases comprised weapons and implements from the Solomon Islands, New Guinea, Fiji, New Caledonia, and various parts of North-east and Eastern Australia.

The following is a full return:—

Mammalia	...	...	...	...	4
Aves	...	...	...	...	108
Reptilia	...	...	...	...	236
Pisces	...	...	...	...	24
Skeletons...	...	...	...	...	1
Insecta, etc.	...	...	...	...	25
Other Invertebrata	...	...	...	...	395
Fossils	...	...	...	...	503
Minerals ²	...	...	...	...	54
Ethnological specimens	...	...	...	...	216
Numismatic specimens	...	...	...	...	76
Casts	...	...	...	...	2
Miscellaneous	...	...	...	...	1
					1645

² Irrespective of the Porter Collection.

PUBLICATIONS.

The second part of Memoir iv., dealing with the results of the "Thetis Trawling Expedition," containing the first portion of the Crustacea, by Mr. T. Whitelegge, was published on 23rd May. It comprised descriptions of the Brachyura, Anomura, Macrura, and Stomatopoda, drawn up with that minuteness and care that characterises all Mr. Whitelegge's work.

Part 10 of Memoir iii., dealing with the Atoll of Funafuti, was issued on May 16th, so completing the volume.

Of our "Records," Parts 7 and 8 of Volume iii., were issued on June 15th, and December 1st, respectively, again completing the volume. Several interesting papers here appeared, which will be further referred to in their proper places.

The preparation of the new edition of Mr. A. J. North's "Descriptive Catalogue of the Nests and Eggs of Birds found breeding in Australia and Tasmania," progressed satisfactorily: nearly all the plates are now prepared. The first part of the MS. was handed to the printer at the end of the year, and should be issued to subscribers early in 1901.

A list of "Duplicate Books and Pamphlets," available for exchange, was prepared by Mr. S. Sinclair, printed, and distributed. This has been the means of negotiating some advantageous exchanges.

The scientific papers, official and unofficial, prepared by the Museum Staff, and published during 1900, are as follows:—

ETHERIDGE, R., Junr.

1. Spears with Incised Ornament.
Aust. Mus. Rec., iii., 7, 1900, pp. 176 - 177.
2. Little-known and Undescribed Permo Carboniferous Pelecypoda in the Australian Museum.
Aust. Mus. Rec., iii., 7, 1900, pp. 178-187, pl. xxxi.-xxxiii.
3. Occasional Notes—
VII. *Phyllothea* and *Cingularia*.
Aust. Mus. Rec., iii., 7, 1900, p. 220.
4. Corals from the Coral Limestones of Lion Creek, Stanwell, near Rockhampton.
Bull. Geol. Surv. Queensland, 12, 1900, pp. 5-24, pls. i. and ii.

HEDLEY, CHARLES.

1. Studies on Australian Mollusca, Parts I. and II.
Proc. Linn. Soc. N.S.W., xxv., 1, 1900, pp. 87 - 100, pls. iii. - iv.; 3, 1900, pp. 495 - 513, pls. xxv.-xxvi.
2. Occasional Notes—
V. *Turricula scalariformis*, Ten-Woods: Its occurrence in New South Wales.
VI. *Scala revoluta*, Hedley: Its occurrence in Fiji.
Aust. Mus. Rec., iii., 7, 1900, p. 219.

NORTH, ALFRED J.

1. Description of a New Bird from North-western Australia.
Vict. Nat., xvii., 4, 1900, pp. 78 - 79.
2. Description of a New Parakeet from the Bourke District, North Queensland.
Vict. Nat., xvii., 5, 1900, pp. 91 - 93.
3. Additional Notes on Carter's Desert bird (*Eremiornis carteri*, North).
Vict. Nat., xvii., 5, 1900, p. 93.
4. Additional Notes on Macgillivray's Parakeet (*Platycercus macgillivrayi*, North).
Vict. Nat., xvii., 6, 1900, pp. 113 - 114.
5. Description of the Nest and Eggs of the Painted Honey-eater (*Entomophila picta*, Gould).
Vict. Nat., xvii., 7, 1900, p. 127.

RAINBOW, W. J.

1. Two New Thomisids.
Aust. Mus. Rec., iii., 7, 1900, pp. 169 - 175, pl. xxx.
2. Descriptions of some New Araneidae of New South Wales. No. 9.
Proc. Linn. Soc. N.S.W., xxv., 3, 1900, pp. 483 - 494, pls. xxiii. - xxiv.

WAITE, EDGAR R.

1. Recurrence of *Megaderma gigas*, Dobson.
Aust. Mus. Rec., iii., 7, 1900, pp. 188 - 189.
2. An extended description of *Mus fuscipes*, Waterhouse.
Aust. Mus. Rec., iii., 7, 1900, pp. 190 - 193.
3. Additions to the Fish-fauna of Lord Howe Island.
Aust. Mus. Rec., iii., 7, 1900, pp. 193 - 209, pls. xxxiv. - xxxvi.
4. Notes on Fishes from Western Australia, and Description of a New Species.
Aust. Mus. Rec., iii., 7, 1900, pp. 210 - 216, pl. xxxvii.
5. The Card-Catalogue System adapted to Museum requirements.
Aust. Mus. Rec., iii., 7, 1900, pp. 217 - 218.
6. Occasional Notes—
VIII. Note on *Lygosoma fragile*, Günther.
Aust. Mus. Rec., iii., 7, 1900, p. 220.

WHITELEGGE, THOMAS.

1. Scientific Results of the Trawling Expedition of H.M.C.S. "Thetis." Crustacea, Part I.—Decapoda and Stomatopoda.
Aust. Mus. Mem., iv., 2, 1900, pp. 135 - 199, pls. xxxii. - xxxv.

INFORMATION DISSEMINATED.

Information supplied to the public, either in writing, or by word of mouth, forms by no means the least important item in the year's work on the part of the Secretary, Scientific Staff, and myself.

Parcels of Fish and Crustaceans were from time to time received from the Commissioners for Fisheries, and either systematically determined for that body, or examined pathologically and reported on.

Determinations were made, and information supplied to the Department of Agriculture, Technical College, Geological Surveys of New South Wales, Queensland, and South Australia, and the *Sydney Town and Country Journal*.

The more important items of information supplied to the public were :—

1. Mr. C. A. Benbow—Habits and economy of the Eland.
2. Mr. H. C. Curl—References to literature bearing on the Australian Aborigines.
3. Rev. G. Glover—Life-history and architecture of Termites.
4. Dr. W. Marshall—Determination of Coins.
5. Dr. Camac Wilkinson—Information *re* Mosquitos.
6. Miss Bahlsen, Bedford College—Determination of Minerals and Fossils.
7. Capt. Farquhar, R.N.—Determination of Birds' eggs.
8. Mr. J. Kershaw, National Museum, Melbourne—Methods of Museum Arrangement.
9. Mr. G. D. Stead—Determination of Lizards.

TRANSFER OF SPECIMENS.

It has been the practice for some years past to assist other Educational Institutions, by transferring to them either duplicates (when possible), or specimens coming more appropriately within their sphere of action.

The more important transfers of this nature were the following :

1. Public Library of New South Wales—Old Colonial and British Newspapers.
2. Geological Laboratory, Sydney University—Nine hundred and twenty-eight mineral oddments for the use of students.
3. Technical College, Newcastle—A similar large collection.
4. Technical College, Bathurst—A similar collection.
5. Technological Museum, Sydney—Metallurgical and Furnace products of economic importance.
6. Girls' Institute, Albury (Mrs. A. Hunter)—Mollusca and Minerals for teaching purposes.

SPIRIT COLLECTIONS.

The specimens in spirit, both exhibited and in store were maintained in good order. The store collection was slightly added to by the incorporation of Snakes and Lizards included in the purchase of the Porter Collection of Minerals.

The Fish in store were again somewhat reduced by the further transfer of specimens to the cases of the new Fish Gallery.

Twenty-four gallons of used spirit were redistilled during 1900.

TAXIDERMISTS.

(Messrs. J. A. Thorpe and R. Grant.)

During the early part of the year the Taxidermist was engaged in completing the remounting of the Australian Psittacidæ, and remounting the Cuckoos and Orioles. His attention was then devoted to preparing illustrative groups of Frogs and Lizards. The latter part of the year was devoted to an entire remounting of the remainder of the Australian Birds, and at the close of the year he had completed the Cranes, Herons, and Bitterns. An interesting group of European Sky-larks with nest, now well acclimatised in New South Wales, was prepared. This work was supplemented by the entire remounting of three large groups of Trogons, Paradisea, and Macaws.

Much of the current work was performed by the Assistant Taxidermist, who also is answerable for the preservation and cleanliness of the exhibited and store skin collections. This duty Mr. Grant most efficiently performed. Three large Sharks were also thoroughly restored, packed, and forwarded to the Royal Zoological Museum at Florence.

The following is a record of the work performed in the workshop:—

Mammal skins prepared and made up	...	42
Bird skins prepared and made up	...	86
Reptile skins prepared and made up	...	1
Birds mounted	... ..	40
Bird Groups mounted	... ..	97
Bird Nest Groups mounted	... ..	5
Reptiles and Batrachia mounted	...	77
Reptilian or Batrachian Groups mounted	...	24
Fish mounted	... ..	10
Crustacea mounted	... ..	1
Total...	... ..	<u>383</u>

ARTICULATORS.

(Messrs. H. Barnes, Junr., and A. R. Taylor.)

In addition to the fleshing, maceration, and mounting of the more important of the year's acquisitions, the Articulators rendered good service by thoroughly cleaning a number of store skeletons. A commencement was also made towards disarticulating, cleaning, and rearticulating some of the existing older preparations.

During the year 462 specimens were handled, as follows:—

Mammalian skeletons cleaned for mounting ...	28
Mammalian skeletons mounted	10
Bird skeletons cleaned for mounting ..	21
Bird skeletons mounted	18
Skeletons cleaned and rearticulated ...	10
Disarticulated bones cleaned for the Comparative Series... ..	375
Total... ..	<u>462</u>

FORMATORI.

(Messrs. H. Barnes, Junr., and A. R. Taylor.)

Two casts were obtained by exchange, and two by purchase. Seven new moulds were prepared, twenty-five casts taken, and seventeen coloured, chiefly Fossils and Minerals.

PHOTOGRAPHER.

(Mr. H. Barnes, Junr.)

Photographic work was somewhat interfered with by the partial demolition of the Studio and its transfer to another site, consequent on excavation work in connection with the building of the South Wing.

The following is a return of the work performed:—

New negatives taken	31
Prints prepared	120
Prints mounted	180
Total... ..	<u>331</u>

Seven additional nest groups were photographed for the "Catalogue of Nest and Eggs."

ARTIFICERS (INCLUDING CARPENTRY AND SMITH'S-WORK.)

(Messrs. R. Barnes and B. Lucas.)

So varied are the duties of a Museum carpenter that it is difficult to epitomise them. In an Institution, such as the Australian Museum, where no work that can possibly be performed

inside is put out, it follows that of all the mechanical assistance, the Carpenter's, which with us really signifies Artificer, is one of the most important. I cannot speak too highly of the assistance I have always received from Messrs. Barnes and Lucas, indeed I have been on many occasions indebted to them for various useful suggestions.

Amongst some of the more important work may be mentioned:—

1. Alterations to Mineral store cabinets and addition of drawers.
2. Two large cupboards for chemical and photographic stores.
3. Two cabinets for microscopic slides.
4. A large coin cabinet.
5. Glazed wooden and metal frames for large photographs, documents, and museum notices, in all ninety-six.
6. Stands for specimens, one hundred and ninety-two.
7. Miscellaneous iron and metal work.

COMPOSITOR AND PRINTER.

(Mr. J. W. Woodhead.)

The exigencies of our Label-printing necessitated an increase in the quantity of type, and to a slight extent of plant also.

During the year 10,487 separate labels were composed, printed, and distributed as follows:—

Mammalia	...	...	...	...	9
Reptilia	...	...	...	...	72
Aves	...	...	...	...	156
Pisces	...	...	...	...	743
Skeletons...	...	...	...	...	95
Insecta, etc.	...	...	...	...	2054
Conchology	...	...	...	...	79
Other Invertebrata	...	...	...	...	1235
Ethnology	...	...	...	...	329
Mineralogy	...	...	...	...	468
Palæontology	29
Numismatics	629
Historical	48
Library	1327
General	3214
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				Total...	...10487
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An "Index List to Periodicals" for use in the Library was also printed. A new industry, which I hope will increase as years go on, was inaugurated last year, that of book-binding. A commencement was made by binding official forms and records used in the Museum, and a few books. The inception of this work is entirely due to Mr. Woodhead.

MAMMALIA.

(Mr. E. R. WAITE, Assistant-in-Charge.)

Mr. Waite reports that "both the exhibited and duplicate collections are in admirable order. The local Zoological Society was again a most liberal donor. The principal animals received were a Dromedary (*Camelus dromedarius*, Linn.), two Collared Peccaries (*Dicotyles tajacu*, Linn.), and a Japanese Macaque (*Macacus fuscatus*, Blyth). Among other donors may be mentioned Messrs. E. G. W. Palmer, W. Hawken, A. M. N. Rose, J. Stein, and J. Stringer. Two small objects only were added to the exhibited collection, namely a peculiar nest of a House Mouse (*Mus musculus*, Linn.), and a thick-tailed Pouched Mouse (*Sminthopsis crassicaudata*, Gould, sp.). The latter was presented by Mr. R. Grant.

The Mouse nest in question (Plate xx., fig. 1) is a very interesting piece of architecture. It is oval in shape, and composed of bits of gnawed wood. The aperture is small and round and opens into a most comfortable habitation. It was presented by Mr. Waite.

A very much brighter day is dawning for our Mammalian Collection. It is my intention to utilize the lower hall of the new South Wing, when completed, in conjunction with the space already occupied in the main building, from which the former will open, wholly for the display of Mammalian and Osteological specimens. This will afford ample room for some years to come, and enable me to exhibit with advantage the rich stores at present existing in the Museum, and put an end to the unavoidable overcrowding from which the specimens now suffer.

To the kindness of Mr. J. Hogan we owe an example of the Great Blood-sucking Bat (*Megaderma gigas*, Dobson) from North-west Australia. This appears to be the first recurrence of this interesting Bat, since its description by Dobson, twenty years ago.³

In addition to the gifts already enumerated by Mr. Waite, the Council of the Zoological Society of New South Wales added to the collection two Sambar Deer (*Cervus unicolor*, Smith), an Egyptian Mongoose (*Herpestes ichneumon*, Linn.), an Indian Wild Boar (*Sus cristata*, Wagner), a Mongoose Lemur (*Lemur mongoz*, Linn.), a Jackall (*Canis aureus*, Linn.), a Puma (*Felis unicolor*, Linn.), a Langur Monkey (*Semnopithecus cephalopterus*, Zimm.), and a Dorcas Gazelle (*Gazella dorcas*, Linn.).

I would ask our country friends and correspondents to note one of our chief desiderata, examples of indigenous Rats. Last year Mr. E. G. W. Palmer, J.P., of Lawson, presented examples of *Mus fuscipes*, Waterhouse, which enabled Mr. Waite to prepare⁴ a more extended description than any yet published.

³ Waite—Recurrence of *Megaderma gigas*, Dobson.—Rec. Austr. Mus., iii., 7, 1900, pp. 188-189.

⁴ Waite—An extended Description of *Mus fuscipes*, Waterhouse—*Ibid.*, pp. 190 - 193.

Fifty-three specimens in all were received in this Section, forty-eight by donation, four by purchase, and one by collection.

AVES.

(Mr. A. J. NORTH, *Assistant-in-Charge*).

Mr. North reports that he was "chiefly occupied in the preparation of the MS. of Part I. of the second edition of the 'Catalogue of Nests and Eggs of Birds found breeding in Australia and Tasmania.' No inconsiderable amount of time was devoted to preliminary work in connection with the process blocks for the illustration of the whole, and in supervising the colouring of the plates of eggs. Towards the end of the year I visited Melbourne and Adelaide, and through the courtesy of the Directors of the National Museum in the former city, and South Australian Museum in the latter, I was enabled to examine the cabinet collections in those Institutions. Opportunity was also taken of inspecting many of the private collections. In addition to ordinary routine work, assistance was afforded to the artist of the Department of Agriculture in the preparation of two plates to illustrate the remainder of the long delayed paper on the 'Insectivorous Birds of New South Wales.'⁵ A collection of Australian Birds' eggs was determined for Capt. Farquhar, R.N., and other small collections for different persons."

We were fortunate enough, through the good offices of Mr. W. Loder, to acquire another *Gymnorhina* nest, formed of a mass of fence lacing wire (Plate xx., fig. 2). This consists of fragments of galvanised wire used in the lacing together of wire-netting used in Rabbit-proof fencing. Such pieces are casually thrown on the ground, and gathered up by the bird for the purpose in question. The cavity is lined with small twigs, then a layer of frayed bark, followed by a thin lining of hair, leaving a concavity hardly large enough for a "Magpie." The general mass of the wire is also interlaced with twigs and small pieces of creeper. The whole structure is fifteen inches in diameter by nine and a half inches in height.

In his Report, Mr. North further states that "our series of types was enriched by the addition of that of Carter's Desert-bird (*Eremiornis carteri*, North), presented by Mr. T. Carter, and the type of *Platyercus macgillivrayi*, North, donated by Dr. W. Macgillivray. Worthy of note amongst many contributions received from Mr. H. Newcombe, were specimens of the Short-toed Sandpiper (*Totanus brevipes*, Vieill.)"

Of the two birds previously mentioned, *Eremiornis carteri*, and *Platyercus macgillivrayi*, one is a new genus and both are new species described by Mr. North.⁶

⁵ The former parts were published in the *N. S. W. Agricultural Gazette*, vii., 1897, and viii., 1898.

⁶ North—*Vict. Nat.*, xvii., 4, 1900, pp. 73-80; 5, pp. 91-93; and 6, p. 113.

"Dr. George Hurst and Mr. J. Gabriel donated nests, Mr. George Savidge nests and eggs, and Mr. R. Grant the curious tracheas of *Manucodia comrii*, Sel., and *Phonygama gouldi*, Gray. An example of *Paradisaea intermedia*, De Vis, not previously existing in our collection, was obtained by exchange with Mr. Wallace Russell."

The Nest Groups were increased by the addition, more particularly, of the nest and eggs (with birds) of the Black-breasted Lark (*Cinclorhamphus cruralis*, V. & H.), from near Goulburn, donated by Mr. A. Payten. Other important groups illustrative of the life-histories of Australian Birds, added to the series were those of Lambert's Wren (*Malurus lamberti*, V. & H.), the Diamond Bird (*Pardalotus punctatus*, Temm.), and the acclimatised Skylark (*Alauda arvensis*, Linn.)

By donation, two hundred and two specimens were received; by exchange, ten; by purchase, one hundred and eight; and by collection, seventy-three.

REPTILIA AND BATRACHIA.

(Mr. E. R. WAITE, *Assistant-in-Charge*.)

Mr. Waite reports that "the acquisitions were unusually numerous, five hundred and fifty entries are contained in the Register, a figure produced largely by the purchase of a miscellaneous collection. The donations of West Australian Reptilia by Mr. W. D. Campbell were also many, other donors to be specially mentioned being Messrs. E. N. Atkin, H. Richards, and the Rev. C. W. Abel."

The exhibited collection remains in good order and excellent condition. Nineteen groups of Amphibia were mounted, and placed in the cases, inclusive of seventeen groups of Frogs and Toads, and two of Newts. Amongst the former were three of the large Solomon Islands forms, viz.:—*Rana opisthodon*, Boul., *R. bufoniformis*, Boul., *R. guppyi*, Boul.

Two hundred and forty-four specimens were received through donation, two hundred and thirty-six by purchase, and twenty-three by collection.

PISCES.

(Mr. E. R. WAITE, *Assistant in-Charge*.)

In this Section, the Assistant-in-Charge reports that his energies during 1900, "were devoted chiefly to the Fish Gallery. Four hundred and seventy species were selected, determined, and mounted, the total number in the cases now being seven hundred and twenty. The whole of the Fishes exhibited were fully catalogued, and labels for about half of them printed. All the Sharks were labelled anew. So far as I can at present judge, the gallery will be in a sufficiently advanced state by the middle of 1901 to

be thrown open to the public. By the kindness of Mr. J. A. Brodie, J.P., Chief Inspector of Fisheries, we were enabled to purchase, on very reasonable terms, some excellent examples of our local food fishes.

Our knowledge of the Fish fauna of Lord Howe Island was materially advanced in 1900, for Mr. Waite was able to largely increase the number of species frequenting the shores of the "Madeira of the Pacific," chiefly through collections made by Mr. T. R. Icely, late Visiting Magistrate, Mrs. T. Nicholls, and others. Descriptions of these will be found in our 'Records.'⁷ Thirty-two species were recorded, one new genus, *Euchilomycterus*, and a new generic name, *Acanthocaulus* (= *Prionurus*, Lacép.) proposed, and the former defined.

Valuable additions were made to our pre-existing specimens through a friendly arrangement with Mr. B. H. Woodward, Curator of the Western Australian Museum, in Perth, advantageous to both Institutions. Our series, previous to this, was not rich in examples from the western waters of the Continent. A paper, descriptive of the more important of these additions has already appeared in the same publication.⁸ Sixteen specimens are recorded, of which one is new—*Hoplegnathus woodwardi*, accompanied by some interesting historical notes on the genus *Hoplegnathus*.

By donations seventy-three specimens were obtained; by exchange two; by purchase twenty-four; and by collection seventy-six.

OSTEOLOGY.

(Mr. E. R. WAITE, *Assistant-in-Charge*).

Little can be done to increase this interesting and instructive Section pending the acquisition of additional space. Some room was made by removing Bird-skeletons to cases in the Upper Main Hall, contiguous to the mounted Birds; this can, however, be only regarded as a temporary arrangement.

Twenty-eight skeletons were added, chiefly those of Birds, and ten existing preparations were repaired, or disarticulated, cleaned, and remounted. The Comparative Series was increased by the addition of three hundred and seventy-five bones.

The additions by donation numbered thirty-three; by purchase one; and by collection six.

INSECTA, MYRIAPODA, AND ARACHNIDA.

(Mr. W. J. RAINBOW, *Assistant-in-Charge*).

Mr. Rainbow reports:—"The work of remounting and registering the exhibited collection of Australian Coleoptera was completed, and a few specimens now only remain to be relabelled. The task

⁷ Waite—Additions to the Fish Fauna of Lord Howe Island.—Rec. Aust. Mus., iii., 7, 1900, pp. 190-209, pls. xxxv. - xxxvii.

⁸ Waite—Notes on Fishes from Western Australia, and Description of a New Species.—Rec. Aust. Mus., iii., 7, 1900, pp. 210-216, pl. xxxvii.

of revising, registering, and rearranging the cabinet series of Australian Heterocera was also completed, and a commencement made with the cabinet collection of Australian Coleoptera. The total number of registrations under this head was nine hundred and forty-five. During the year there were many calls upon my time by students of Australian Entomology, and much assistance was given both in the matter of naming specimens and of imparting instruction as to the preservation of collections."

"The donations were fairly numerous, and these included a number of important additions. Our principal contributions were from Mr. C. French, Government Entomologist, Victoria, to whom we were indebted for specimens of Coleoptera and Lepidoptera, some of which were not only rare but desiderata. The Rev. T. Watt Leggatt, of Alua, Mallicollo, New Hebrides, principally contributed Arachnida; Mr. G. A. Waterhouse, local Butterflies; and Messrs. J. J. Walker, R.N., and W. D. Campbell, miscellaneous collections, the latter from Western Australia."

The most important exchange was with Prof. Yasuski Nawa, Commissioner for Agriculture, Tokio.

Mr. Rainbow contributed an interesting paper to our official publication⁹ on "Two New Thomisids," the Crab or Flower Spiders. Here are described *Misumena tristani*, and *Saccodomus formivorus*, the genus of the latter form being a new one. "It is remarkable," says Mr. Rainbow, "not alone on account of its form, but also for the reason that, contrary to all previously recorded facts based upon accurate observations of the habits of the Thomisidæ, it constructs a bag-like nest."

One thousand and seventy specimens were received by donation; one hundred and forty-two by exchange; twenty-five by purchase; and one hundred and fifty-four by collection.

CONCHOLOGY.

(Mr. C. HEDLEY, *Assistant-in-Charge.*)

Mr. Hedley reports that his attention was, during 1900, chiefly directed to classifying the store collection of Mollusca. "During many years past, parcels of shells, obtained by donation, collection, or purchase were received, and packed away untouched. To put in order this huge accumulation of named and nameless shells eight months of 1900 were spent. I also devoted seven weeks to sorting the collection of Mollusca in alcohol. One day in each week was reserved for the care of the collections in cabinets and gallery. Fourteen hundred and fifty tablets of shells were added to the former. An Ethno-Conchological series of shells from North Queensland, presented by Dr. W. E. Roth, Northern Protector of Aborigines, Queensland, was determined and the results communicated to him."

⁹ Rainbow—Rec. Aust. Mus., iii., 7, 1900, pp. 169-175, pl. xxx.

A very valuable addition was made through the presentation by the late Rev. J. Hervier, shortly before his death, of co-types of his *Pleurotomie* from Lifu, numbering five hundred and fifty-seven specimens, and comprising one hundred and seventy-five species. An equally interesting general series of shells from New Caledonia was given by the Rev. Père Lambert. Mr. Hedley, adds:—“Other presentations of importance were—Marine shells from Victoria, by Mr. J. H. Gatliff; similar molluscs from Tasmania, by the Rev. H. D. Atkinson; land shells from the New Hebrides, obtained during the cruise of H.M.S. ‘Ringarooma,’ by Mr. J. J. Walker, R.N., etc.”

Three thousand seven hundred and eight-four specimens were donated; sixty-one received in exchange; and eight hundred and sixty collected.

INVERTEBRATA (OTHER THAN INSECTA, ETC., AND MOLLUSCA.)

(Mr. T. WHITELEGGE, *Assistant-in-Charge*.)

“The principal portion of my time,” reports Mr. Whitelegge, “during the past year, was occupied with the Crustacea of the ‘Thetis’ Expedition, and in working out a large collection of Sponges received from the Commissioners of Fisheries, consisting of over six hundred specimens, and representing about seventy species. Part I. of the ‘Thetis’ Crustacea (Brachyura, Anomura, Macrura, Stomatopoda, etc.),¹⁰ was completed early in the year, and Part II. (Isopoda), was almost ready for publication at its close. A named set of Caprellidæ was returned by Prof. P. Meyer, of Naples, which formed part of a collection forwarded to him by order of the Trustees, in December, 1899. During the year, printed labels were attached to the exhibited Foraminifera models, Echinoderms, and the remainder of the Sponges.”

Mr. Whitelegge further states that “the most valuable donation was a series of microscopic slides of Sponge sections, from Prof. A. Dendy, D.Sc., of Canterbury, N.Z., representing seventy-four species. Many of the sections are co-types, and were used by him in the preparation of his ‘Catalogue of Non-Calcareous Sponges.’”¹¹

In addition to the microscopic slides already mentioned, Prof. Dendy was so kind as to forward for Mr. Whitelegge’s assistance two hundred and twenty-four Sponge cuttings (for microscopic purposes), of types and species described by the late Mr. H. J. Carter, the specimens themselves being now in the Natural History Branch of the British Museum. From these two hundred and thirty sections were prepared by Mr. Whitelegge, and proved of the greatest service to him.

¹⁰ Whitelegge—Aust. Mus. Mem., iv., 1900, Scientific Results of the Trawling Expedition of H.M.C.S. ‘Thetis,’ etc.: Crustacea, Parts i. and ii., pp. 133 - 199, pls. xxxii. - xxxv.

¹¹ Dendy—Proc. Roy. Soc. Vict., (n.s.) vii., 1895.

The collection of Sponges received from the Commissioners of Fisheries, was forwarded to us with the view of ascertaining more particularly what proportion, if any, was likely to be of commercial value. These sponges were at once placed in Mr. Whitelegge's hands, and I look forward with much interest to his elaboration of the material.

By donation, one hundred and seventy-five specimens were received; by exchange, one only; by purchase, three hundred and ninety-five; and by collection, one hundred and ninety-three.

ETHNOLOGY.

(MR. A. J. NORTH, *Assistant-in-Charge*).

"My time," reports Mr. North, in this section, "was solely devoted to the registration of specimens, in which you afforded me substantial help. The further administration and care of the specimens entirely devolved on yourself, or was carried out under your personal supervision."

In the previous year's Report, I referred to the all-but completed examination of the Ethnological stores. This I systematically continued in the early part of 1900, as before with the assistance of Mr. R. Grant, and completed it. All that now remains is to select from these stores as complete a series as possible for the new Ethnological Gallery.

Our collection of Pottery was enriched by the addition of another cooking pot from Santo, New Hebrides, presented by the Rev. A. H. Robertson. It is a fine specimen of its kind (Plate xxi.), eight inches high, ten inches diameter (across the mouth), weight five pounds eleven ounces, has a capacity of one and a half gallons, and is highly ornate. Under the somewhat flat circumferential margin, is a series of oblique nicks, with below a wide panel, bounded by a raised border, top and bottom. This panel carries vertical rows of prominent nodules, and below the lower raised border is again a circle of oblique nicks.

The series of Pigments that I have for some time been endeavouring to form was enriched by a number of specimens of red earths derived from the decomposition of both Limonite and Hematite, Ochres, and Kaolin from Northern Queensland, presented by Dr. W. E. Roth, Northern Protector of Aborigines, Queensland. These are in use by the following tribes—Wapa-Bara of Keppel Island, Koko-Ngodi of Princess Charlotte Bay, Koko-Minni of the Middle Palmer River, Koko-Yimidir of the McIvor River, Ng-Gerikudi of the Batavia River, and the Workai of the Georgina River, in South-east Queensland.

We acquired another example of the Coconut-fibre "Armour," or Corselet, and accompanying sleeves, used by the Gilbert or Kingsmill Islanders, by presentation from Mr. P. G. Black. The knitting (for want of a better term) of the corselet is close and

regular, and produces a hard stiff and inflexible envelope for the body-trunk, two feet seven inches in height, with a girth of about four feet. The front of the ventro-thoracic shield is ornamented by a median and vertical line of black diamond-shaped figures, with three similar lines on the inside and outside of the tergal shield. Edge-Partington figures¹² a similar corselet with three rows on the ventro-thoracic shield. The tergal shield is high and upstanding, without any trace of a continuous circular collar as represented by Schmeltz and Krause,¹³ in another corselet from the same islands: the latter is, however, similarly ornamented to that presented by Mr. Black. The overlap is at the left side, and the envelope appears to be kept in place simply by its own rigidity and curvature, without the aid of the lacing in front sometimes met with in these investitures.¹⁴ The sleeves, separate from the corselet, are in one, with a double neck piece, through which the head is protruded. Each sleeve is terminated by a guard for the back of the hand, and this is retained in position by a thumb-loop. The knitting is large and loose, rendering the sleeves pliable, quite different from the rigid condition of the corselet. The entire length of the whole is five feet, the sleeves at about the elbows are six and three-quarter inches wide, and the neck pieces eight inches wide.

Another corselet (Plate xxii.), presented by Mr. E. Twynam, is more elaborate in every way. The ventro-thoracic shield bears two cross bars, a clavicular and thoracic, with between them a row of five elongated diamond-shaped figures, and below the thoracic bar, the venter carries two similar rows one above the other. The inside of the tergal shield is transversely divided by four cross-bars into five panels or spaces, the three upper panels containing seven diamond-shaped figures in each, the central narrow panel bears nine such, and the lumbar or bottom broad space contains three transverse rows of nine similar figures; the outside of the tergal shield, which is of the high square shape without collar, is similarly ornamented. From the arm-holes downwards the cuirass is open at both sides, with an overlap of the tergal shield forwards over the ventro-thoracic, the margins of the former having a coil loop through which pass similar strings made fast on the centre of the venter. This is precisely as seen in Webster's illustration already quoted. The height is two feet ten inches, and the girth four feet.

A very remarkable discovery was made by Mr. T. Whitelegge in the early part of the year, along the local sea-board. A series of heavy gales displaced the sand hummocks at Bondi and Maroubra

¹² Edge-Partington—Ethnol. Album, 1st Series, pt. 1, pl. clxx.

¹³ Schmeltz and Krause—Eth.-Anthrop. Abth. Mus. Godeffroy, 1881, pl. xxviii., f. 2.

¹⁴ Webster—Illus. Cat., 1897, 14, p. 12, f. 139.

Bays, Dee-Why Lagoon, etc., exposing what appeared to be the old land surface. On the latter Mr. Whitelegge found revealed, what we had never before imagined to exist, a series of Aboriginal "workshops," where for generations the Blacks of the Port Jackson District must have manufactured chips, splinters, and points for insertion along the distal margins of their spears and other purposes. The old land surface at Bondi, as I saw it, in company with the discoverer, was covered with thousands of these chips, some of them exquisitely made, with core pieces, chippers and rubbers. The lithological character of the material used was very varied, from pure white crystalline quartz, opaque amorphous quartz, every variety of chert, and quartzite to rocks of a metamorphic character. It is quite clear that the siliceous material was derived in a great measure from the surrounding Hawkesbury Sandstone, but the others were probably obtained from distant sources. I regard this as one of the most important Ethnological discoveries made in New South Wales for many years.

The presentation of Cáva (Ava, Kava, or Yaquona) as a gift is referred to by Mariner¹⁵ in his interesting account of the ceremonious preparation of this beverage by the Tongans. The same practice seems to have existed in Fiji, for Seemann says,¹⁶ "Roots of Yaquona are presented to visitors as tokens of good will, and to the temple as offerings." To Mr. James Green, of Tonga, we are indebted for an example of the root of *Piper methysticum*, Forst., in gift or presentation form (Plate xxiii., fig. 1). It consists of the leaf-stem of a narrow-leaved palm of which the mid-ribs of the pinnules are retained, and the wings stripped off. These mid-ribs then stand out as a series of skewers, and on them the pieces of Cáva root, cut into convenient sizes, are strung, each piece having a hole bored through it. The skewer-like mid-ribs are then pressed up parallel to the leafstem, and wound round with a tape of the inner bark of the *Hibiscus*. The entire length of this pleasing object is five and three-quarter feet.

Our admirable collection of Canoes received an addition from the Solomon Islands at the hands of a valued benefactor, already mentioned, Mr. P. G. Black. The Canoe is fourteen feet nine inches in length, with a beam of eighteen inches at the centre, and a remarkably flat bottom, except immediately fore and aft. It is built of rather narrow boards, stitched together with rattan, and the seams served with some kind of gum cement. The short fore and aft prows are decorated each with two tufts of feathers, the upper tufts apparently composed of those of the Frigate-bird, and the lower of Cockatoos, white in colour. The locality is Ngela (New Florida) Island.

¹⁵ Mariner—Acc. Natives Tonga Islands, ii., 1817, p. 201.

¹⁶ Seemann—Viti, 1862, p. 326.

Amongst the productions of our Continental Blacks, perhaps the most noticeable objects are two "Dancing-boards," from the neighbourhood of Boulder, Western Australia (Plate xxiii., fig. 2), presented by Mr. W. D. Campbell, of the Geological Survey of Western Australia. The larger of these is a remarkable object, being a flat board of hard dark wood, thirteen feet five inches long, eight inches wide throughout, and with an average thickness of half-an-inch. It is quite rigid and highly ornate. The sculpture is characteristically West Australian, consisting of wide grooves, transverse, longitudinal, or oblique, producing by their arrangement a series of more or less rhomboid, roughly hexagonal, or obliquely oblong figures. The grooving is more or less continuous throughout, from figure to figure, the junction of any two grooves from opposite directions forming a right-angle. According to the angle at which the light strikes the surface, the figures and the ground-work are in shadow or high-light. The ends of the board are rounded, both surfaces flat, and the back gouged, after the manner often seen on some old Boomerangs.

Mr. Campbell, in the course of correspondence, informs me that these boards vary in size from four feet long by three inches wide up to the dimensions already given. They are used when an extra important corroboree is held, in a dance which Mr. Campbell believes is called *Walma*, one kept very secret from women, accompanied by a special song emphasising the latter fact. Of the small boards, one is worn horizontally in front in the belt, and another is placed upright along the back. The large board is called *Oorloo-edma*, the first word meaning mysterious, and is held by a man at each end, horizontally, with another individual beyond holding a smaller board upright with one hand—or, sometimes a series of long boards are used, a short distance one behind the other. All the tribes inhabiting the interior, from Norseman northwards, use them, but not the coast blacks.

One of the subjects connected with Pacific Ethnology that has had least attention paid to it, is the matter of Children's Toys. One would hardly expect to find that the object represented by Plates xxiv. and xxv. was of this nature. Such, however, I am informed by Miss C. Robertson, who has presented it to the Trustees, to be the case. It is a Child's Doll, ten inches high, three and a half inches wide, and carved in stone, representing simply a human head and face. The circumferential groove, eyes, and V-shaped mouth show traces of blue colour, and the general surface of the face and the nostrils was painted a light vermilion. Neither hair nor ears are represented, but around the forehead margin is a series of short blue radii. We already possessed one of these faces at the time Miss Robertson presented the present example, but I had always been at a loss to account for its use. Miss Robertson's long residence at her father's (Rev. H. A. Robertson)

Mission Station at Dillon's Bay, on Erromanga, has enabled her to supply the deficiency in our knowledge. Edge-Partington figures two of these heads as "stone figures,"¹⁷ one from Malo Island, the other without locality. The gift is from Mallicollo.

The last presentation that I need refer to in this Section is that of a series of Palæo-Neolithic Implements from the Egyptian Desert, given by Mr. H. W. Seton-Karr. The important discovery of these implements, and the workshops of the old fabricators, in the Wady el Sheikh, and Wady Sojoor, tributaries of the Nile, in the desert east of that mighty river, is graphically described by Dr. H. O. Forbes,¹⁸ accompanied by some beautiful illustrations of the tools. The collection presented to us is from a spot ninety-seven miles south of Cairo, and from ten to twelve miles east of the Nile. The material of which the implements are made is either a yellowish, pale grey, or dark brown chert, showing evident signs of long weathering. The implements, many of which exhibit a high degree of finish, consist of hatchet or axe and chisel-like tools, cores, leaf-shaped flints, knife-like tools, many of them double-pointed, and large flakes with a curved outline.

The acquisitions for the year in this Section were as follows:—by donation, four hundred and ninety-eight; by exchange, twenty-three; by purchase, two hundred and sixteen; and by collection, forty-four.¹⁹

HISTORICAL.

(The CURATOR).

The registration of specimens in this Section was kept under by Mr. North, but in consequence of his attention having to be directed more to his especial duties I relieved him of further responsibility.

The objects added in 1900 were few in number, but of high importance historically. In 1894 the Trustees received from the Government of New South Wales, in trust, a number of objects, prints, and documents, generally known as the "Cook Relics," all of which were, at one time, there is every reason to believe, the property of the great circumnavigator, Capt. James Cook, R.N., F.R.S., and with whose name the earliest history of Australia is so intimately associated.

At the time these relics came to the Museum, certain of the documents were found to be missing,²⁰ having become mislaid, shortly after the arrival of the collection in Sydney. After much patient enquiry and searching, they were fortunately found, and

¹⁷ Edge-Partington—Ethnol. Album, 3rd series, pl. lix., figs. 4 and 5.

¹⁸ Forbes—Bull. Liverpool Museums, ii., 3 and 4, 1900, pp. 78-115, plates and map.

¹⁹ Besides the flint chips collected by Mr. Whitelegge, of which there were several hundreds.

²⁰ Aust. Mus. Rep., 1891 (1895), p. 1, par. 3.

then passed into the Trustees' possession, to be placed with the general collection. On examination I found these documents to be of the greatest interest, and to consist of:—

1. Draft of a letter from Capt. Cook, to Phillip Stephens, Secretary to the Admiralty, informing the Lords Commissioners of his treatment at Rio by the Spanish Vice-Roy. It is undated, but the occurrences are given in 'Cook's Journal' between Nov. 14-28, 1768.²¹

Cook refers to his letter in his "Journal," under date, Dec. 2, 1768. He says:—"This morning sent a Packet for the Secretary of the Admiralty on board the Spanish Pacquet, containing copies of all the Memorials and Letters that have passed between the Vice-Roy and me, and likewise another Packet containing Duplicates thereof I left with the Vice-Roy to be forwarded to Lisbon."²²

2. Draft of a letter from Capt. Cook, to the Lords Commissioners of the Admiralty, dated H.M.S. Bark "Endeavour," Rio Janeiro, 28th Nov., 1768, informing the Board that he had drawn on them for certain moneys for provisions, in favour of Messrs. Scott and Pringle.

3. Draft of "Rules to be observed by every person belonging to His Majesty's Bark the Endeavour for the better establishing a regular and uniform trade for Provisions, etc., with the Inhabitants of George's Island, and to prevent frauds and disputes as well on the one side as the other."²³

4. Draft MS. of "Journal" of a portion of the occurrences between Oct. 9th, 1769, at Poverty Bay, to Nov. 27th, 1769, at Cape Brett, N.Z. (with omissions).²⁴ Much of this is written in a very disjointed manner, and is, evidently, only intended as a memorandum.

5. Names of the Islands surrounding Otaheite, with their bearings.

6. Draft of a letter to his Excellency Petrus Albertus van der Parra, Governor-General, "dated on board his Britannic Majesty's Ship Endeavor, in Batavia Road, the 16th Oct., 1770," informing His Excellency that he was in want of funds.²⁵

7. Draft of a letter to Phillip Stephens, Secretary to the Admiralty, reporting to the Lords Commissioners his proceedings in brief between leaving Rio, on Dec. 8th, 1768, to arrival at

²¹ See Wharton—Capt. James Cook's Journal, 1893, pp. 18-22.

²² *Ibid.*, p. 22.

²³ *Ibid.*, p. 61.

²⁴ *Ibid.*, pp. 131-163.

²⁵ *Ibid.*, p. 335.

Batavia, and the Observation of the Transit of Venus, 3rd June, 1769, dated "Endeavour Bark, at Onrust, near Batavia, the 23rd Oct., 1770."

This letter was sent with an Admiralty Packet mentioned by Admiral Wharton, under date, Oct. 25th, 1770. Cook says, in his "Journal:"—"In the evening I sent the Admiralty Packet on board the Kronenburg, Captain Fredrick Kelger, Commadore, who, together with another Ship, sails immediately for the Cape, where she waits for the remainder of the Fleet."²⁶

8. Draft of a letter from Capt. Cook to the Royal Society of London, reporting the Observation of the Transit of Venus, 3rd June, 1769, dated "Endeavour Bark, Batavia, 23rd Oct., 1770."

9. An account of the Transit of Venus at Tahiti, 3rd June, 1769.²⁷

10. Four leaves from the journal of the Second Voyage, giving an account of the inhabitants of Amsterdam Island,²⁸ under date October, 1773.²⁹

11. "A Table for the Object-glass Micrometer apply^d to the object end of Mr. Cooks Telescope of 18 inch focal length."

12. Admiral James Smith's letter to Edward Hawke Locker, Greenwich Hospital, Kent, dated Moreton Abbey, 8th Oct., 1780, informing the latter that Mrs. Cook did not then possess any of her husband's handwriting.

13. "Song composed by Thomas Perry," probably one of the crew of the "Resolution," during the Second Voyage, on leaving the South Polar region (in type).

During the year I succeeded in labelling and arranging the Cook Relics proper, with the assistance of Mr. B. Lucas. They were placed for temporary convenience at the south end of the Upper Main Hall.

A series of old MS. documents, possessed by the Trustees, was also labelled and arranged in two cases, placed on the landings of the private staircase.

NUMISMATICS.

(Mr. A. J. NORTH, *Assistant-in-Charge*).

The registration in this Section was kept down by Mr. North, but the general work was performed by myself. In former Reports I referred to my desire to form the nucleus of a National Numismatic Collection. During the latter part of 1899 this

²⁶ *Ibid*, p. 357.

²⁷ *Ibid*, p. 76.

²⁸ Tongatabu or Tonga.

²⁹ Cook—Voy. towards S. Pole, etc., 3rd ed., i., 1779, p. 217.

desire took practical shape by my commencing the sorting and preliminary arrangement of such Coins as the Trustees possessed. A commencement was made with the Australian Tradesmen's Tokens, and the work continued in the early part of last year. Between February and the end of May, I succeeded in identifying, labelling, and permanently arranging three hundred and forty-one tokens, and preparing indication labels for a further series of three hundred and seventy tokens that are required to render our collection anything like complete. In so doing, I have to acknowledge valuable suggestions made by Dr. Mark Long, and Messrs. Basset Hull, and Coleman P. Hynam.

The Collection of Medals was enriched by the addition of original copies of the Clarke Memorial Medal, and the Prize Essay Medal, of the Royal Society of New South Wales, presented by the Council of the latter. The former derives its origin from a sum of money bequeathed by the late Rev. W. B. Clarke, M.A., to establish a medal in his memory "to be awarded from time to time for meritorious contributions to the Geology, Mineralogy, and Natural History of Australia."

An electrotype of the Copley Medal of the Royal Society of London, bestowed by the Council in 1776 on Capt. James Cook, R.N., F.R.S., in recognition of a paper read before the Society on March 7th, 1776, being an account of "The Method he had taken for preserving the Health of the Crew of His Majesty's Ship the *Resolution* during his late Voyage round the World." Cook was the fortieth recipient of the Copley Medal, "which has long been regarded as the highest scientific distinction that the Royal Society can bestow." It originated in a legacy of one hundred pounds from Sir Godfrey Copley, Bart., F.R.S., left in 1709, and is "awarded to the author of the most scientific discovery or contribution to science by discovery or otherwise" during any one year.

The Council of the Zoological Society of London presented two bronze replicas of its silver medal, which is awarded to those "who have done good service in the cause of Zoology."

We are also indebted to the Council of the Iron and Steel Institute for an electrotype of the obverse of the Bessemer Gold Medal, awarded annually "for exceptional eminence in connection with the manufacture of Iron and Steel."

By donation, forty-six coins were received; six were obtained by exchange; and seventy-six by purchase.

MINERALOGY.

(Mr. T. COOKSEY, Ph.D., B.Sc., *Consulting Assistant-in-Charge*).

Dr. Cooksey reports:—"The very large and valuable collection of Minerals, principally from New South Wales localities, purchased from Mr. D. A. Porter, of Tamworth, was sorted, prepared for

registration, and temporarily stored. Many of these specimens will be available for display in the exhibition cases, filling gaps in our own collection, or else replacing poor representatives already in our possession; the remainder will then be ready for exchange. Many additional specimens in the cases received printed labels in place of the old written ones, and a number of large specimens was specially mounted for better display. The collection is gradually absorbing all the space allotted to it."

In connection with the Porter Collection, I paid two visits to Tamworth. The first occasion (January) was simply one of inspection. I found the collection to be undoubtedly a fine one, the number of foreign specimens comparatively small, whilst the majority of indigenous minerals is from the northern part of this State. It comprises crystallised minerals, ores, lode stones, alluvial washings, a limited number of free gold specimens, a very large number of gem-stones in the rough, some cut stones, a small collection of well shaped rocks, and a general series of fossils from the country around Tamworth. The finest portion consists of quartzes, tourmalines, tin-crystals, hornblendes, molybdenite, manganese ores, wolfram, topazes, orthoclase crystals, and some calcites. My second visit to Tamworth took place in March, on the completion of negotiations, to pack and remove the collection.

The collection of Fulgarites was increased by a number of good specimens, collected by Mr. T. Whitelegge amongst the sand-hills along the coast-line between Bondi and Maroubra.

Alluvial Tin deposits from a new discovery—Greenbushes Tinfield, Western Australia—were presented by Mr. A. H. Tayler and others. This was a discovery that did not realise the great expectations anticipated.

To Mr. W. Troup we were indebted for some remarkably fine examples of Wolfram from Noble Island. The lode from which these were taken is said to be traceable nearly across the island, from south-east to north-west, and for a distance of three hundred feet is well defined, with a width of from six to nine feet. The ore contains in unassorted samples 43% Tungstic-acid, selected samples reaching as high as 60 - 70%.

An opportunity occurred in February of acquiring fifteen finely executed glass models of the more celebrated historical Diamonds, viz., Kohinoor (2), Grand Mogul, Regent of France, Star of the South, Sancy, Orlov, Grand Duke of Tuscany, Pigot, Pasha of Egypt, Pole Star, Hope (blue), Imperatrice, Nassack, and Shah of Persia.

A very remarkable gold nugget (Plate xxvi.) was lent to me by Mr. Thomas Cahill, with permission to take a cast. This nugget in outline presents an extraordinary resemblance to the map of Australia, hence the name that has been given to it, "The Map of Australia Nugget." It weighs 23oz. 5dwts., and was found on

Ruby Plains Station, at the head of one of the branches of the Mary River, Northern Territory, forty miles from Hallick. The finder was Mr. R. Boulton.

It became necessary, through the overcrowding of the ballustrade cases around the Mineral Gallery, to remove the contents of certain devoted to a small series illustrating the Physical Features of Minerals. These I transferred to other cases on the landing leading from the main staircase to the Mineral Gallery door, so giving Dr. Cooksey the opportunity of expanding the general collection.

With the assistance of Mr. B. Lucas, I overhauled the whole of the Mineral stores, spending several weeks in the work. By this means I was able to distribute a large number of duplicate specimens, as already explained under "Transfer of Specimens."

Four hundred and sixty-eight printed labels were distributed throughout the cases.

One hundred and sixty-one specimens were acquired by donation; twenty-five by exchange; fifty-four (exclusive of the Porter Collection) by purchase; and seven by collecting.

PALEONTOLOGY.

(The CURATOR).

Eighteen hundred and twenty-seven specimens were added to the Collection in 1900, chiefly Invertebrata. In the wall cases of the Geological Hall, reserved for large specimens, were placed some further Mesozoic Cephalopoda, and Marsupial remains, chiefly Macropodidæ. The more important general additions were a series of Devonian Corals from the Tamworth District, collected by myself and Mr. B. Lucas; Upper Marine Mollusca, also collected by myself at Gerringong; and a good series of Eocene and Miocene fossils, obtained by Mr. Charles Hedley, at Muddy Creek, Victoria. Through the presentation by Mr. H. W. Blomfield of a large series of Queensland Cretaceous fossils, our knowledge of the life of that period has been advanced. Prominent among these are portions of large Cephalopoda of the genera *Crioceras* and *Ancyloteras*, and especially a series of tree-trunk portions, probably Coniferous, riddled by a very large *Teredo*. The occurrence of this genus in our Cretaceous was previously known, but its presence in such numbers comes as a surprise. From Mr. John Dibbs we received some fine Moa remains from the alluvial deposits of the Clutha Valley, near Cromwell, Otago, N.Z., including the femora, tibiæ, tarso-metatarsi, and phalangeals, of *Dinornis maximus*, Owen. These have been set up, and when placed in natural position attain a height of six feet, the phalangeals showing a spread of fifteen inches.

Seven hundred and twenty specimens were acquired by donation; two hundred and ninety-nine by exchange; five hundred and three by purchase; and three hundred and five through collecting.

LIBRARY.

(Mr. S. SINCLAIR, *Librarian*).

A list of duplicate books was prepared by Mr. Sinclair, printed and circulated, with the result that numerous useful exchanges of books were negotiated with other Institutions.

The new book-cases supplied in 1899, were fitted with blinds.

We have now adopted the formaline method of book disinfection by the use of a powder known as "Paraform."

The additions to the Library numbered two hundred and fifty-three works, irrespective of pamphlets and serials.

OFFICE.

(Mr. S. SINCLAIR, *Secretary*).

The work of the Office, inclusive of correspondence, accounts, and general business was, as heretofore, conducted by the Secretary, assisted by the Clerk (Mr. F. T. Clark).

In conclusion, I have to express my sense of the willing help and assistance I received during the past year from all members of the Staff.
